

# U3510 LCC

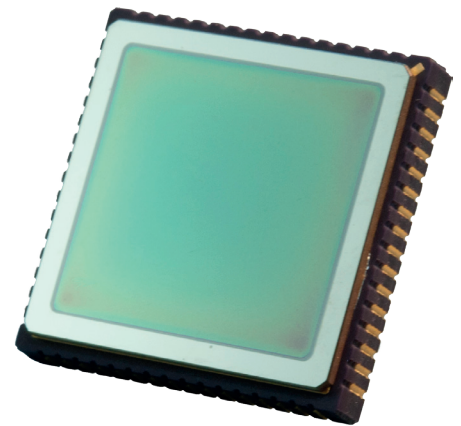


## MEETING TODAY'S CHALLENGES TO PROVIDE A SECURE FUTURE

Specifically designed for commercial applications, the U3510 LCC is the market's lightest, most compact thermal imaging detector to offer a resolution of 320 x 240 pixels. Just 1.83 x 1.83 x 0.37 cm in size, the low-cost U3510 LCC weighs less than 4 grams.

With a 25 micron pixel pitch, this uncooled sensor employs vanadium-oxide technology to detect long-wave infrared energy through adverse atmospheric conditions and total darkness to display crystal-clear thermal video images. The U3510 LCC features a low-profile, surface-mountable ceramic leadless chip carrier (LCC) that can be mounted to any printed circuit board using LCC sockets.

Its compact size, light weight and powerful thermal imaging capabilities make the U3510 LCC a leading choice for commercial security, detection and monitoring products.



- Designed for commercial applications
- Low-profile, surface-mountable, ceramic leadless chip carrier
- Smallest, lightest detector providing resolution of 320 x 240 pixels
- Measures just 1.83 x 1.83 x 0.37 cm
- Uncooled, vanadium-oxide, 25 micron pixel pitch detector

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# U3510 LCC

## SYSTEM FEATURES

### HIGHLIGHTS HEAD

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Detector Type	Uncooled VOx Microbolometer
Array Size	320 x 240
Detector Pitch	25 $\mu$ m
Spectral Response	LWIR 8 - 14 $\mu$ m

### VIDEO

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Frame Rate	60 Hz
Nominal Data Rate	6.25 MHz
Format	NTSC/PAL Compatible

### ELECTRICAL

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Power	$\leq$ 300 mW Nominal
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<b>PART NUMBER</b>	1013510-001
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### PERFORMANCE

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Sensitivity (NETD)	<40 mK @ F/1
Multiplexer	CMOS Ripple Integration
Area Fill Factor	90%
Typical Operability	>99%
Number of Analog Outputs	1
Output Voltage Range	0.5 - 4.5 v
Time Constant	$\leq$ 18 msec
Temperature Stabilization	No TEC required (On-Chip Temperature Feedback)
On-chip Non Uniformity Correction (NUC)	6 bits parallel

### MECHANICAL

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Dimensions (L x W x H)	1.83 x 1.83 x 0.37 cm (0.72 x 0.72 x 0.145 inches)
Weight	$\leq$ 4 g

### ENVIRONMENTAL

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Operating Temperature	-40°C to +71°C
Storage Temperature	-46°C to +85°C

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\* Specifications subject to change without notice.  
Specifications subject to change without notice. The products described herein are subject to US Government Export Controls.